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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/806,775	07/09/2001	Markku Rajala	0386/00294	5959
7590 05/05/2004				
Burton A Amernick Connolly Bove Lodge & Hutz PO Box 19088 Washington, DC 20036-0088			EXAMINER HOFFMANN, JOHN M	
			ART UNIT 1731	PAPER NUMBER

DATE MAILED: 05/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/806,775

Applicant(s)

RAJALA ET AL.

Examiner

John Hoffmann

Art Unit

1731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-24 and 27-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-24 and 27-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/21/04 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 22-24 and 27-35 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

There is no support for the new limitation that the two "components react with each other". As per page 5, lines 6-12 of the specification: each component reacts to form oxide particles and then the particles combine.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 33 -35 and 27 are rejected under 35 U.S.C. 102 b as being anticipated by FI 98832.

Figure 4 and the associated text of the Finnish patent clearly disclose the invention. Note the two structures are substantially the same except that the present invention has features 5 and 5a – however such are optional (see page 5, lines 21-22 of the present specification). Although the patent does not disclose using a gas for the first component, such is merely and intended use – it does not limit structure. A tube can be use to carry fluid or liquid. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 28, 22, and 29-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi 4336049 in view of Finnish Patent 98832

Figure 3, and from col. 1, line 48 to col. 2, line 53 (all of Takahashi) discloses the same invention, however, the atomized material is not created at the flame. Rather it is atomized in a nebulizer. However, the Finnish patent teaches to nebulize at the flame so as to produce very small particles, in a quick, inexpensive and one-phase manner. (page 2 of the translation, last sentence).

IT would have been obvious to alter the Takahashi method, by using the 98832 method of producing the atomized liquid for the advantages of the Finnish patent.

Claims 22 and 30 are clearly met.

Claim 29: the particles would be as homogeneous as Applicant's particle would be.

Claims 31-32: see Finnish patent, page 5 of the translation, lines 18-20

Claims 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi 4388098 in view of Finnish Patent 98832 as applied to claim 28 and further in view of Ainslie 4923279.

Takahashi discloses the invention as claimed, except the use of erbium nitrate and a form of aluminum. Col.1, lines 64-68 discloses using "at least one metal salt". Then at the top of col. 2, Takahashi discloses only the following metals: alkalis, alkaline earths, lead and lanthanum [sic] - such being "conventional" metal dopants (col. 1, lines 27-31). Takahashi discloses using nitrates of each of these dopants.

Ainslie teaches that erbium (and aluminum) as a dopant will create fibers for a "wide range of devices" such as broadband sources, super luminescent sources, amplifiers and temperature sensors (col. 1, lines 12-26, 49; col. 2, lines 42-45; and col. 3, lines 19-25). It would have been obvious to improve the Takahashi method by using erbium and aluminum as (either alternative or additional) dopants, for the known benefits that they impart. Furthermore, it would have been obvious to use nitrates as the precursor for the erbium and aluminum because Takahashi discloses using nitrates for all of the other metal dopants.

Response to Arguments

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

It is argued that FI 98832 does not teach a gas tube arranged to introduce a first component to the flame in gaseous or vaporous form. It really doesn't matter much whether the reference teaches what is put in the tubes. A tube that can transport one

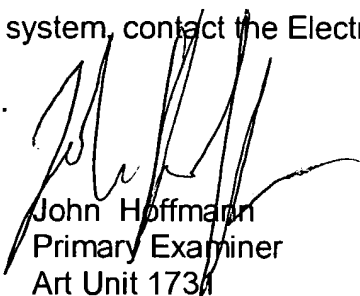
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gas, can transport any other gas. The particular gas used is not relevant to the structure. It is a method step, not structure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Hoffmann whose telephone number is (571) 272 1191. The examiner can normally be reached on Monday through Friday, 7:00- 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


John Hoffmann
Primary Examiner
Art Unit 1731

5-3-04

jmh